

UW Mathematics Colloquia 2009/10

Dr. Jeffrey Humpherys

Brigham Young University

The Existence and Stability of Traveling Waves

Traveling waves are ubiquitous in nature. They are observed and studied in many fields, including fluid dynamics, nonlinear optics, porous media, population dynamics, and neuroscience. In this talk, we introduce the existence and stability problems for traveling waves and describe some of the key challenges encountered in their study. We then examine some of the more successful numerical methods used, and how they have recently uncovered the structure and intuition needed to rigorously prove a series of open problems in compressible fluid flow.

Open problems will also be discussed.

Thursday, September 17, 2009 ~ 4:10 –5:00 p.m.

Classroom Building ~ Room 310

Please join us for a reception preceding the talk
3:30 ~ 4:00pm @ Ross Hall 223 / Mathematics Lounge

U of Wyoming– Department of Mathematics

Please direct any questions
about the Colloquium to
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